

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2004/002111

A. CLASSIFICATION OF SUBJECT MATTER  
C07C-2/08; C07C-5/02; B01J-21/00; B01J 23/755

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
C07C & B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

Delphion. (Keywords: catalytic distillation, structure or monolith, oligomer\* or hydrogenation)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
X Y	WO 02/092216 (Harkins et al.) Nov. 21, 2002 (pp 8-9, bridging paragraph; p 14, ln 11 - 23; p 16, ln 2 - 3; p 17, ln 17 - 34. p 14 refers to <i>Structured Catalysts and Reactors</i> edited by Cybulski & Moulijn)	1 - 5, 7 - 12, 20 - 24 6, 13 - 19, 25 - 55
Y	<i>Structured Catalysts and Reactors</i> (ed: A. Cybulski & J. Moulijn) 1998 Marcel Dekker Inc. (preface, p iv, pp 18, 24 - 25, 29 - 34 (chapter 2))	1 - 55
Y	US 5,235,102 (Palmer et al.) Aug. 10 1993 (col 2, ln 9 - 67; col 3 ln 35 - col 4, ln 15; col 5, ln 2 - 11)	1 - 55
Y	US 5,457,268 (Greene et al.) Oct. 10, 1995 (col 3, line 35 - col 4, line 19)	1 - 55

[X ] Further documents are listed in the continuation of Box C.

[X ] See patent family annex.

\* Special categories of cited documents :  
 "A" document defining the general state of the art which is not considered to be of particular relevance  
 "E" earlier application or patent but published on or after the international filing date  
 "L" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  
 "O" document referring to an oral disclosure, use, exhibition or other means  
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
 "&" document member of the same patent family

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
Y	US 5,003,124 (Smith, Jr. <i>et al.</i> ) May 26, 1991 (see entire document)	25 - 37, 44 - 48
Y	US 2001/0006154 (Krug <i>et al.</i> ) Jul. 5, 2001 (see entire document)	25 - 37, 44 - 48
A	US 5,057,468 (Adams, J.) Oct. 15, 1991	1 - 55
A	US 5,622,997 (Tennison <i>et al.</i> ) Apr. 22, 1997	1 - 55
A	US 6,291,719 (Guo <i>et al.</i> ) Sep. 18, 2001	1 - 55

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
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